

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1- 34 (Cancelled).

35. (Currently Amended): An isolated polynucleotide encoding *Neisseria meningitidis* LbpB selected from the group consisting of:

SEQ ID NO: 1 (from nucleotide 100 to nucleotide 2274), or a polynucleotide having at least 90% ~~[[80%]]~~ identity thereto;

SEQ ID NO:3; or a polynucleotide having at least 90% ~~[[80%]]~~ identity thereto;

SEQ ID NO:5, or a polynucleotide having at least 90% ~~[[80%]]~~ identity thereto;

SEQ ID NO:7, or a polynucleotide having at least 90% ~~[[80%]]~~ identity thereto; and

SEQ ID NO:9, or a polynucleotide having at least 90% ~~[[80%]]~~ identity thereto.

36. (Currently Amended): A recombinant expression system comprising the ~~[[The]]~~ polynucleotide of claim 35 ~~[[comprising a recombinant expression system]]~~, wherein said expression system is capable of producing a LbpB polypeptide in a compatible host cell.

37. (Previously Presented): A host cell comprising the expression system of claim 36.

38. (Currently Amended): A process for producing a LbpB polypeptide comprising culturing the host cell of claim 37 under conditions sufficient for the production of said polypeptide and recovering the polypeptide from the culture.

39. (Previously Presented): A process for producing a cell which produces a LbpB polypeptide thereof comprising transforming or transfecting a host cell with the expression system of claim 36 such that the host cell, under appropriate culture conditions, produces a LbpB polypeptide.

40. (Withdrawn): An isolated LbpB polypeptide selected from the group consisting of:  
SEQ ID NO: 2, or a polypeptide having 80% identity over its entire length;  
SEQ ID NO:4, or a polypeptide having 80% identity over its entire length;  
SEQ ID NO:6, or a polypeptide having 80% identity over its entire length;  
SEQ ID NO:8, or a polypeptide having 80% identity over its entire length; and  
SEQ ID NO:10, or a polypeptide having 80% identity over its entire length.

41. (Withdrawn): The polypeptide of claim 40 which comprises the amino acid sequence of SEQ ID NO:2, 4, 6, 8, or 10, respectively, from amino acid position 19 to the C-terminus of the polypeptide.

42. (Withdrawn): A fragment of the polypeptide of claim 40, wherein the fragment retains an antigenic activity of the polypeptide, with the proviso that the fragments represented by amino acid position 650-725 of SEQ ID NO:2 and 559-741 of SEQ ID NO:6 are not included.

43. (Withdrawn): An antibody immunospecific for the LbpB polypeptide of claim 40.

44. (Withdrawn): A method for identifying compounds which inhibit the LbpB polypeptide of claim 40 which comprises:

- (a) contacting a candidate compound with cells which express the LbpB polypeptide; and
- (b) observing the binding, or inhibition of a functional response; or comparing the ability of the cells which were contacted with the candidate compounds with the same cells which were not contacted for LbpB polypeptide activity.

45. (Withdrawn): A vaccine comprising an effective amount of the polypeptide of claim 40 and a pharmaceutically acceptable carrier.

46. (Withdrawn): A vaccine comprising an effective amount of a protein comprising a fragment of the polypeptide of claim 42 and a pharmaceutically acceptable carrier, wherein the fragment retains an antigenic activity of the polypeptide.

47. (New): The vaccine according to claim 45 wherein said composition comprises at least one other *N. meningitidis* antigen.

48. (Withdrawn): The vaccine according to claim 46 wherein said composition comprises at least one other *N. meningitidis* antigen.

49. (Withdrawn): A method for vaccinating a human against neisserial disease comprising administering to said human a composition comprising an effective amount of the polypeptide, fragment or protein of claim 40.

50. (Withdrawn): A method for vaccinating a human against neisserial disease comprising administering to said human a composition comprising an effective amount of the polynucleotide of claim 35.

51. (Withdrawn): A method for diagnosing neisserial disease in a human comprising the steps of incubating an antibody produced by administering to a suitable human or animal the polypeptide of claim 40 with a sample of biological fluids from a human to be diagnosed, wherein in the presence of neisserial bacteria an antigen-antibody complex is formed, and subsequently analysing said fluid sample for the presence of said complex.

52. (Withdrawn): A therapeutic composition useful in treating humans with neisserial disease comprising at least one antibody directed against the polypeptide of claim 40 and a suitable pharmaceutical carrier.

53. (Currently Amended): A kit for diagnosing infection with neisserial bacteria in a human comprising [[a]] an isolated polynucleotide of claim 35.

54. (Withdrawn): A kit for diagnosing infection with neisserial bacteria in a human comprising a polypeptide, fragment or protein of claim 40.

55. (Withdrawn): A kit for diagnosing infection with neisserial bacteria in a human comprising an antibody of claim 43.